

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
31 March 2005 (31.03.2005)

PCT

(10) International Publication Number  
**WO 2005/027723 A2**

(51) International Patent Classification<sup>7</sup>: **A61B**

(21) International Application Number:  
PCT/US2004/030209

(22) International Filing Date:  
15 September 2004 (15.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/503,353 16 September 2003 (16.09.2003) US

(71) Applicant (for all designated States except US): **MERCK & CO., INC.** [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **IP, Charlotte** [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).

(74) Common Representative: **MERCK & CO., INC.**; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: REAL TIME ASSAY FOR ROTAVIRUS

AAT TAC CCT CAC TAA AGG AAC TAC CAG ATG ATG TAA AGA CTG ATG TTG  
AAC AGC AGT TAA ATT CAA TTG ATT TAA TTA ATC CCA TTA ATG CTA TAG  
ATG ATA TCG AAT CAT TGA TTA GAA ATT TAA TTC AAG ATT ATG ACA GAA  
CAT TTT TAA TGT TAA AAG GAC TTT TGA AGC AAT GCA ACT ATG AAT ATG  
CAT ATC CGG AGT CAC ATA ATT TAA AAA TAT TAA CCA TCT ACA CAT GAC  
CCT CTA TGA GCA CAA TAG TTA AAA GCT AAC ACT GTC AAA AAC CTA AAT  
GGC TAT AGG GGC GTT ATG TGA CC

(57) Abstract: A highly sensitive quantitative reverse transcriptase polymerase chain reaction (qRT-PCR) assay with wide linear dynamic range is useful as a high-throughput screening assay for detecting Rotavirus in clinical samples. The primers and probe specifically detect Rotavirus of all serotypes. The assay is particularly useful as a screening assay for determining the cause of diarrhea.



WO 2005/027723 A2